652 quate means at their disposal they yet succeeded in achieving a certain measure of success, and notwithstanding the tremendous difficulties with which they had to cope. Some of the issues demanding attention were the reorganization of the administrative machinery in the newly-annexed territories, the complete overhauling of means of communication, the readjustment of agriculture, the reconstruction of the oil industry, which had greatly suffered during the war, and the necessity of providing for the needs of the army owing to the exposed geographical position of the country.

RUMANIA'S ECONOMIC POLICY

186 454 Until the advent to power in 1928 of the National Peasant Party under M. Maniu, the policy of the country was inspired by an uncompromising nationalism that tended to the complete exclusion of foreign capital so necessary for the development of Rumania. The chief instigators of this policy were the late brothers John and Vintila Bratianu, who had raised the maxim "prin noi însine" (by ourselves alone) to the sanctity of a religious dogma. The governments that had succeeded each other since the conclusion of the war, with the exception of the one presided over by M. Vaida-Voevod, were either formed by the Bratianu, or so-called Liberal Party, or by some nominees of theirs who were quite amenable to their views, so that a certain sequence in the policy pursued may be detected throughout this period, in spite of the change of persons at the helm of the State, while any divergence in their pronouncements from the original programme may be explained by the desire to allay the mistrust engendered by the Bratianu policy. The principal aim of this policy was the attainment of self-sufficiency through the industrialization of the country. This found expression in extensive legislation dealing with the development of national resources, the chief enactment being the special mining law promulgated in July, 1924.

382 471 315 The subsoil resources had already been declared national property, and the special mining law, which was aimed par-

ticularly at the oil industry, prescribed the manner in which they were to be exploited. The development of these resources was to be entrusted to corporations or "régies" in which the Government as well as private capital, both Rumanian and foreign, would participate, but in such a way as to permit of the majority of shares being controlled by the Rumanian Government. At the same time laws were enacted for increasing the utilization of methane gas (C.H.4) which was already in use both for lighting and heating purposes in Transylvania, and which is available as a large source of industrial power, its output being calculated to amount to as much as 2,000 million cubic metres per annum, the consumption of which for 1930 reached over 503 million c. metres. The methods used by the Liberal Party to secure a mainhold of the supplies of methane gas are particularly illuminating of the mentality of the leaders of that party, as they were revealed by M. Madgearu in the Rumanian Chamber in 1929. An exclusive monopoly was conferred on a group of "Liberals," who supplied the gas to industrialists at arbitrary prices so as to force the latter out of the market and leave this to rival firms belonging to adepts of the "Liberal" Party. All the efforts of the Liberal Party to promote the nationalization of this gas were aimed at securing the economic mastery of Transylvanian industries. A similar law was also passed dealing with water power, the reserves of which are estimated at 5,206,225 H.P., of which amount 735,425 h.p. represent 50 per cent of the force produced at the Iron Gates by the Danube, 1,422,465 h.p. by the tributaries of the Theiss, 2,164,748 h.p. by the Danube tributaries between the Timish and the Sereth, and the remaining 884,665 h.p. by the Sereth and its tributaries. Of all this potential force only about 52,000 h.p. is actually in use. The State owned practically the totality of the railway lines, most of the extensive fisheries in the marshes and delta of the Danube, the salt mines of Ocnele Mari, Slanic, Uioara and Targu Ocna, which are exploited as a State monopoly and assure to it a revenue of some 700 million lei per annum, over 75 per cent of the entire vast timberlands, several coal and iron mines, the gold mines in the Bihor mountains, the annual output of which is about 2,500 to 3,000 kilogrammes

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The following table shows a detailed list of imports during 1930:

Imports	Tons.	Percentage of total bulk.	Value in 1,000 lei.	Percentage of total value.
Livestock	296	0.04	16,439	0.07
Animal food products	10,240	1.32	221,872	0.98
Furs	120	0.02	244,046	1.08
Leather and leather goods ...	3,309	0.43	485,519	2.15
Wool, hair and goods ...	5,907	0.76	1,365,991	9.06
Natural silk and goods ...	47	0.01	86,746	0.39
Various animal substances ...	3,977	0.51	156,554	0.70
Cereals and derivatives ...	29,802	3.85	306,702	1.36
Seeds	4,133	0.54	113,976	0.51
Vegetable oils	2,331	0.30	96,980	0.43
Vegetables, flowers, etc. ...	9,713	1.26	221,084	0.98
Fruit and groceries	33,315	4.31	818,244	3.63
Beverages	240	0.03	8,422	0.04
Sugar and confectionery ...	1,248	0.16	16,975	0.07
Vegetable textiles	49,592	6.41	6,702,290	29.73
Timber and derivatives ...	13,538	1.75	146,850	0.65
Paper and derivatives ...	13.561	1.75	524,469	2.34
Rubber celluloid & derivatives	8,183	1.05	740,386	3.28
Mineral waters and salts ...	900	0.13	8,355	0.04
Glassware	2,464	0.32	161,939	0.72
Earths, stones and derivatives	83,542	10.80	473,880	2.10
Fuel (mineral) and derivatives	180,841	23.37	302,589	1.34
Iron and ironware	236,723	30.59	3,442,482	15.28
Apparatus, machines & motors	34,604	4.47	2,836,640	12.58
Vehicles	8,539	1.10	638,734	2.83
Metals and metalloids other than iron	12,473	1.61	868,706	3.86
Toys	215	0.03	40,836	0.18
Musical instruments ...	472	0.06	139,055	0.62
Optical instruments	126	0.01	101,446	0.45
Watches and clocks	153	0.02	77,480	0.34
Jewellery	73	0.01	41,410	0.18
Chemicals and medicines ...	14,673	1.89	606,471	2.69
Perfumery	47	0.01	48,744	0.21
Colours and varnishes ...	7,620	0.89	373,402	1.66
Explosives	728	0.99	105,215	0.47
Totals	7,737,745	100.00	22,540,929	100.00

OIL & MINING INDUSTRIES

In spite of the continuous increase in the output of crude oil (the output for 1931 amounting to 48 million barrels), the industry is facing a most critical situation owing to the Russian competition and low world prices, excessive transport charges, and high taxation. Notwithstanding these adverse factors, however, the output of oil is steadily increasing, Rumania now being the fourth largest producer of petroleum, as may be seen from the following table:

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RUMANIA

Production in millions of barrels

	1931	1930	1929
U.S.A.	856	898	1007
Russia	158	135	99
Venezuela	118	137	137
Rumania	48	42	35
Persia	47	45	42

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651 According to a report published by the *Adeverul* of January 21st, 1932, of which a summary is given below, there are no signs of an early improvement:

"The recent abrogation of the law extending certain subsidies to small producers has created much dissatisfaction, for this enactment, while rescinding the advantages already granted, maintained taxes recently imposed. Only a few of the producers who possessed refineries of their own had so far been able to secure the subsidies that the law had allocated to them, and that only indirectly, as they have been simply credited with these sums, which they will eventually be allowed to use against payment of taxes to the State. As the situation of the public finances is unsatisfactory, one can scarcely hope that these subsidies will be paid out shortly to the rest of the producers.

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382 Another question which preoccupies the industry is the marketing of the heavy oil residues, the output of which in 1930 amounted to 1,959,371 metric tons. Though this residue constitutes an excellent fuel, its manipulation is difficult and necessitates a large expenditure for the construction of special receptacles. Some companies, in order to get rid of their accumulated big stocks, had recourse to a new method, that of destroying them by fire. This is a disastrous solution for all concerned, and many members of the industrial community affirm that the problem could be solved if our railway administration would reduce its transport charges, so as to permit the marketing of this product abroad at the prevailing world prices. As the railway administration, however, refuses to make concessions in the matter, the oil companies see no other solution than to construct a new special pipe-line to Constantsa, though this scheme meets with violent opposition from railway circles. . . ."

OIL AND MINING INDUSTRIES

The above article shows how erroneous were the views of the late V. Bratianu in decreeing the nationalization of the oil deposits in order to prevent foreign companies from sharing in the development of the oil industry. The native producers, being without adequate capital resources, have been unable to take advantage of the benefits the mining law meant to reserve for them. They have undoubtedly contributed in increasing the crude oil output, but on the other hand, not possessing the means either to provide for its refining or its marketing, they have only contributed towards creating a glut on the market which is disastrous to themselves, but which unfortunately also affects adversely, though to a lesser degree, the foreign companies in Rumania.

Yet it could easily have been foreseen that an increase in the crude oil output would necessitate the expenditure of large sums of money for the construction of refineries, storage tanks, pipe-lines, tank-wagons, etc., all of which would have to be secured from abroad, seeing that the financial resources of Rumania were utterly inadequate to cope with the demands which were made on them from all sides. The scheme for the construction of a second pipe-line from the oil-fields to Constantsa, mooted by the companies, has been definitely rejected owing to the intervention of the railway administration, which naturally wanted to reserve as much as possible of the transport of the oil for itself. It has offered to grant increased transport facilities for oil, but it is very doubtful whether it will be able to fulfil its promises, because the bridge over the Danube at Cernavoda carries only a single track and its carrying capacity is limited. The construction of a second pipe-line to Constantsa therefore seems to be indispensable. The one already existing between Ploeşti and Constantsa has a total length of 320 km. Some 3,000 tons of oil may be pumped through it in 24 hours, and in 1931 the total quantity of motor oil conveyed through this pipe-line amounted to 753,000 tons. Another pipe-line exists between Ploeşti and Giurgiu, on the Danube, 180 km. in length, but the main port by which petroleum products are exported is Constantsa. In 1931, 3,926,247 tons were shipped from that port.

The principal oilfields extend in a semi-circular strip on the

315 382 southern slopes of the bend of the Carpathians, where the mountains gradually merge into the plains of Wallachia and Moldavia. About two-thirds of the production is secured from the regions of Moreni and Ochiuri, the basins of the rivers Prahova and Dombovitsa furnishing almost 90 per cent of the total yield. There are minor fields farther east in the neighbourhood of Buzau, and also in Moldavia in the region of Bacau. The main oil refineries are situated at Ploeşti. The capital invested in the oil industry is estimated at 11 milliard lei, 60 per cent of which is Rumanian. The number of workmen employed in the industry is about 30,000. The output of crude oil for the years 1928–30 was:

Year	*Tons*	*Estimated value in lei*
1928 ...	4,282,377 ...	7,345,923,066
1929 ...	4,836,974 ...	7,441,204,190
1930 ...	5,792,311 ...	6,552,118,582

[47] About half of the yield was from oilfields owned by the State. The ratio for 1930 was 3,083,468 tons from State-owned oilfields, or 53.20 per cent, and 2,708,843 tons, or 46.80 per cent, from privately-owned oilfields. The quantities produced were distributed per region as follows: Prahova, 4,275,721 tons; Dambovița, 1,390,215 tons; Buzau, 61,225 tons; Bacau, 65,150 tons.

Of the total output for 1930, some 1,602,757 tons were consumed locally. At the end of June, 1932, it was reported that the total monthly output had attained about 543,000 tons, the average monthly production of the principal companies being as follows: Astra Romana, 109,464 tons; Steaua Romana, 83,667 tons; Concordia, 78,974 tons; Creditul Minier, 27,760 tons; Romano-Americana, 33,800 tons; Phoenix, 65,286 tons; Prahova, 20,878 tons; and Columbia, 17,564 tons.

315 484 232 Prices of petroleum products having dropped to the extent of 75 per cent since 1928, the Rumanian oil industry is passing through an era of grave depression which is causing a very serious repercussion on the whole economic life of the country, taking into account the great amount of capital in-

vested in it and the high contribution it is expected to make to the revenue of the State. The average price in lei of petroleum products per ton during the years 1928–31 were as follows, as reported by the Constantsa *Chamber of Commerce Bulletin*: 1928, at 4,080; 1929, at 3,800; 1930, at 2,600; 1931, at 1,031 lei. The following table, which gives quotations of the leading oil shares on the Bucarest stock market, is indicative of the depression which exists:

Average annual quotations

Share	1929	1930	*June* 1931	*June* 1932
Astra Romana ...	2391	1430	500	340
Steaua Romana ...	1234	571	230	135
Speranța	1210	639	380	100
Petrol Block ...	320	176	75	54
Concordia	1286	767	265	250
Creditul Minier ...	690	364	185	90
Redevența	321	182	65	30
I.R.D.P.	397	143	92	35

The other mineral resources of Rumania are considerable, especially in Transylvania, but no proper geological survey has ever been made, nor have any mines other than salt mines ever been properly exploited. The following figures give the quantities of minerals mined during 1930, the total value of the same being estimated at 10,437 million lei: Lignite, 2,071,057 tons; coal, 298,825 tons; copper, 6,655 tons and 169; iron, 92,517 tons; manganese, 33,528 tons; bauxite, 678 tons; pyrites, 24,264 tons; amber, 107 tons; salt, 304,777 tons; lead and antimony, 984 tons; lead glaze, 194 tons; gold, 2,672 kilograms, silver, 4.418 kilograms.

Lignite is found in extensive beds not only in Transylvania and the Banat but also in the old kingdom. It is mainly used for the railways. The better qualities of coal are found in south-western Transylvania and the Banat. Copper is principally mined at Tulcea, near the mouth of the Danube, and at Ciuc in Transylvania.

B. THE PETROLEUM INDUSTRY

1. Oil Production

315 There are four districts in which oil production is centred. Prahova, Dâmbovița, Buzău and Bacău, while the town of Ploești is the hub of the oil industry. In 1938 out of a total production of 6·6 million tons, the Prahova district produced 3·98 million tons—2·78 from private and 1·2 from State concessions; Dâmbovița produced 2·54 million tons, two-thirds of which came from State concessions; Buzău and Bacău produced only some 40,000 tons each. In 1941 Prahova production had dropped from 3·9 to 3·4 million tons; Dâmbovița from 2·5 to 1·7 million tons, production from Buzău and from Bacău remaining unchanged.

[382] The wells are connected by pipeline with the refineries, all but three of which are in Ploești; even at the time of peak production in 1936 Rumanian refining capacity was sufficient to take care of all the crude oil production of the country. The total refinery capacity in 1938 was over 10 million tons including nearly 2 million tons of cracking capacity, but of the total capacity probably not more than half is of modern design.

2. Consumption and Exports

315 439 The following table indicates internal consumption and exports in 1938, when crude production was 6·6 million tons. Exports were made to all countries in Europe including over 700,000 tons to Germany, over 500,000 tons each to the United Kingdom and to Italy, nearly 300,000 tons each to France and Czechoslovakia, and some 400,000 tons to North Africa, of which 280,000 tons to Egypt.

1938

Internal Consumption and Exports

	Internal Consumption	*Exports*	
	'000 tons		
Crude oil ..	—	336	
Motor spirit ..	154	1,586	
Kerosine ..	182	827	74% via Constanța.
Gas/Diesel oil ..	117	755	
Fuel oil	1,001	917	20% via Giurgiu.
Special fuel oil*	131	—	
Lubricants ..	24	41	
Wax, asphalt, etc.	64	30	

* Mainly for central heating.

315 Nearly 70 per cent. of internal consumption was therefore represented by fuel and special fuel oil, and this figure shows the extent to which industrial and domestic plant have been built up on the basis of burning fuel oil, and the dependence of the country on adequate supplies of fuel oil for its essential services. In this dependence will be seen some explanation of the fact that Rumania is one of the few countries in the world whose internal consumption of oil for non-military purposes has not declined in war-time.

The main consumers of fuel oil and special fuel oil were as follows:—

	Tons
Railways	195,000
Shipping Services	90,000
Industries	419,000
Power Stations	160,000
Central Heating	148,000
Agriculture and Peasant Mills	19,000

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TABLE III

PRINCIPAL RUMANIAN OIL COMPANIES, 1942

Name	Founded	Capital (mill. lei)	1940 Crude Production (tons)	Controlling interest
Astra Română	1910	2.542	1.173.256	Royal Dutch Shell
Concordia	1907	2.030	793.626	Kontinental Oel A.G.
Româno-Americana	1904	1.500	727.345	Standard Oil of New Jersey
Steaua Română	1895	1.500	640.920	French, Rumanian, British
Unirea	1921	720	652.000	General Mining Corporation
Columbia	1905	380	585.193	Kontinental Oel A.G.
Creditul Minier	1919	605	292.166	Rumanian
Prahova	1920	330	271.947	A.G.I.P. (Azienda Generale Italiana Petroli)
I.R.D.P. (Industria Romana de Petrol)	1920	120	117.925	Sudostchemie Hand. A.G. German
Petrolul Românesc	1920	120	83.377	Creditul Minier, Rumanian
Starnaphtha	1926	60	55.530	French
Foraj Lemoine	1923	44	42.658	Rumanian, Franco-Belgian
Redevența	1918	300	28.474	Rumanian
Foraky Românească	1922	50	25.958	German
Sondrum	1921	100	17.982	French
Petrol Block	1918	470	—	German (refining company)

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TABLE IV

PRINCIPAL RUMANIAN REFINERIES

Name	Location	Annual Capacity (tons)	Cracking Capacity (tons)
Astra Română	Ploești	1,750,000	600,000
Steaua Română	Câmpina	1,500,000	350,000
Concordia	Ploești	1,300,000	200,000
Română-Americano	Ploești	1,100,000	350,000
Phoenix Unirea Orion	Ploești	800,000	150,000
Standard Petrol Block	Ploești	550,000	150,000
Creditul Minier	Brazi	530,000	150,000
Colombia	Ploești	485,000	200,000
Unirea Speranța	Ploești	400,000	—
Redevența	Ploești	230,000	—
Prahova	Bucarest	200,000	—
Lumina (Petrolmina)	Ploești	140,000	—
Noris	Ploești	50,000	—